

AGENDA ITEM SUMMARY

AGENDA ITEM

Missouri High School Graduates Performance Report
Coordinating Board for Higher Education
April 12, 2007

DESCRIPTION

On an annual basis, the Coordinating Board for Higher Education has statutory responsibility to provide a report to the State Board of Education about the performance of public high school graduates during their first year of attendance at Missouri's public two- and four-year institutions. The intent of this board item is to provide a summary of the April 2007 Missouri High School Graduates Performance Report.

Background

As part of the Missouri Outstanding Schools Act, the Coordinating Board was given responsibility to prepare an annual report on recent high school graduates' academic performance during their initial year of pursuing collegiate-level work. As described in statute, the data in this report are to be arranged by individual school and disaggregated by race and gender. Further, individual student names are not to be used, and no grade point averages are to be disclosed in any cells with three or fewer students.

By statute, the report must include:

- Grade point average after the initial year in college
- Percent of students returning to college after the first and second semester
- Percent of students taking remedial courses in the basic academic subjects of English, mathematics, or reading
- Other data as determined by rule and regulation of the Coordinating Board for Higher Education

The annual report, which was first issued in 1996, is intended to provide information to secondary and postsecondary stakeholders regarding student preparation, persistence, and completion by graduates of each of the state's public high schools in public postsecondary institutions in the state. Missouri Department of Higher Education (MDHE) staff believes the report supports ongoing initiatives focused on alignment of expectations and competencies in the transition between high school graduation and entry into collegiate-level work. These initiatives, including those coordinated by the Department of Elementary and Secondary Education (DESE), the MDHE, the METS Coalition, and other independent organizations, are intended to promote consistent messages to students entering colleges and universities in the state, and available trend data on student performance can and should enrich those discussions.

April 2007 Report

The High School Graduates Performance Report tracks Missouri public high school graduates entering the state's public two- and four-year postsecondary institutions as first-time freshmen in the fall semester following high school graduation.

Data for the following categories are included in Attachment A:

- Demographic characteristics of college entrants
- Academic preparation
- Performance and retention
- Degree completion

New Freshmen Demographics

Table 1 provides data on enrollment demographics for Missouri public high school graduates who entered Missouri public two- and four-year colleges and universities. The table includes a baseline year (1996 high school graduates), the previous year (2005), and the current cohort year (2006). General highlights include:

- Overall enrollment in this cohort has increased 29.0 percent since 1996 but is down .7 percent since 2005.
- Sector distribution reflects a continuing, gradual trend of enrollment of this cohort in public two-year over public four-year institutions.
- The proportion of males enrolling in this cohort has increased slightly since 2005.
- The Caucasian percentage of this student cohort decreased from 82.2 percent to 77.9 percent since 2005.
- The number of students identified as American Indian / Alaska native, non-resident alien, or of other or unknown race/ethnicity, has increased 87.8 percent since 2005, and 257.9 percent since 1996. This may illustrate the need for revision in categories for reporting of student race/ethnicity, as well as the need for greater flexibility in students' self-reporting as multi-racial; the U.S. Department of Education is finalizing a revised classification system that is designed to address these issues.
- The proportion of Asian and Hispanic students in this cohort increased slightly since 2005 while the proportion of African-American students decreased slightly.

Academic Preparation

Tables 2 and 3 provide data on academic preparation of Missouri public high school graduates who entered Missouri public two- and four-year institutions. Included are data on ACT test takers, completion of the CBHE-recommended high school core curriculum, and enrollment in remedial coursework. Table 2 includes a baseline year (1996 high school graduates), the previous year (2005), and the current cohort year (2006), while Table 3 reports 2006 data by gender and race / ethnicity. General highlights include:

- The percentage of students who had taken the ACT in 2006 (73 percent) is slightly higher than 1996 and 2005 participation. The average composite score (22 percent) is slightly lower than that reported in 1996 and 2005 although still slightly higher than averages for all 2006 high school graduates in Missouri (21.6) and nationally (21.1).
- The percentage of students enrolled requiring remediation continues to shift toward the two-year sector.
- Though still enrolling in greater numbers, females report a slightly lower ACT score than males, and a higher percentage enroll in remedial math and reading. Females do have a higher first-term GPA than males (see Table 6).
- Enduring achievement gaps are reflected in the percentage of students enrolled in remedial coursework as reported by race / ethnicity.
- The percentage of students in this cohort requiring remediation has increased measurably since 1996. There is some improvement since 2005, although enrollment in remedial mathematics shows a slight annual increase.
 - Overall: 36.4 percent (2006) compared to 36.5 percent (2005)
 - Math: 29.6 percent (2006) compared to 29.4 percent (2005)
 - English: 16.9 percent (2006) compared to 17.9 percent (2005)
 - Reading: 10.1 percent (2006) compared to 10.2 percent (2005)

Performance and Retention in College

Tables 4 and 5 provide data on first-year college performance of Missouri public high school graduates who entered Missouri public two- and four-year institutions. These data include fall and spring semester retention rates and GPAs as well as freshman-to-sophomore retention rates. Table 4 includes a baseline year (1996 high school graduates), the previous reported year (2004), and the most recent available data (2005), while Table 5 reports 2005 retention data by gender and race / ethnicity. General highlights include:

- Retention rates have remained largely stable in two- and four-year institutions at all three “checkpoints” since 1996.
- First- and second-term GPA for all students have increased since 1996.
- First-term retention for all gender and racial/ethnic groups is nearly identical; second-term retention is higher for Asian students and lower for African-Americans and students of other/unknown race/ethnicity. Caucasian and Hispanic students, as well as males and females as a whole, return for the spring at a rate of 83-84 percent.
- By the second fall (freshman-to-sophomore retention), Caucasian and Hispanic students, as well as males and females as a whole, return at a rate of 71-75 percent. African-American students retain at 63 percent, students of other/unknown race/ethnicity retain at 69 percent, and Asian students retain at 82 percent.

Degree Completion

Tables 6 and 7 provide information on degree completion status among more than 18,700 Missouri public high school graduates who entered the state’s public colleges and universities as degree-seeking freshmen in fall 2000. Table 6 reports data for fall 1999 and fall 2000 entering

freshmen, while Table 7 reports 2000 data by gender and race / ethnicity. General highlights include:

- 51.8 percent of this cohort received a degree from a Missouri public institution by spring 2006 (38.5 percent received a baccalaureate degree while 13.3 percent received an associate degree).
 - 2.8 percent of fall 2000 degree-seeking freshmen were awarded two- and four-year degrees during this period
- 6.6 percent are still pursuing degrees in the state's public higher education system
- The remaining 41.6 percent are classified as "out of the public system" as of spring 2006. This total includes some students who may have later transferred to and graduated from independent or out-of-state institutions, although MDHE data systems do not presently enable tracking into these sectors.
- 54.5 percent of females in the fall 2000 cohort received two- or four-year degrees from a public Missouri institution by the spring of 2006, compared to 48.3 percent of males. Graduation rates by race/ethnicity:
 - African-American 28.0 percent
 - Asian 55.7 percent
 - Caucasian 54.2 percent
 - Hispanic 47.1 percent
 - Other/Unknown 44.9 percent

Access to the Full Report

The above information is presented on the MDHE website for each of Missouri's public high schools at <http://www.dhe.mo.gov/hsgradreport.shtml>. Trend data is presented, where available, back to 1996 graduates. Formal notification of the availability of the report is also being provided to the State Board of Education as directed by statute, and may serve as a basis for discussion and collaborative work in a future joint meeting of the Coordinating Board and State Board of Education.

Finally, these data were posted for the first time last year in individual school district profiles on the DESE website - <http://dese.mo.gov/schooldata/> - and will be updated there as well for greater accessibility by secondary teachers, staff, and others.

Discussion

The data presented in this board item, and in the charts and tables of the attachment, present a range of potential issues for further discussion as well as for ongoing policy work:

- Why might enrollment in this cohort have declined slightly since 2005, despite a basically stable number of public high school graduates as reported by DESE in Graduation Rate data (<http://dese.mo.gov/schooldata/four/000000/gradnone.html>)?
- What factors, including student preparation and affordability, might be driving a continuing trend into enrollment in two-year institutions?

- Where are current limitations in reporting of race/ethnicity creating growing gaps in our knowledge of student performance?
- Why might females earn higher grades and retain and complete at higher rates than males, despite entering with lower ACT scores and (in math and reading) requiring more remediation?
- Are there targeted initiatives in place already across the state that are positively impacting developmental/remedial success and overall persistence for students of diverse racial / ethnic backgrounds?
- How might these data be further analyzed to better support discussions and initiatives focusing on transfer student success?

Conclusion

The Missouri High School Graduates Performance Report is a valuable resource in addressing and illuminating questions regarding gaps in the preparation and enrollment of Missouri's public high school graduates in public colleges and universities in the state, as well as in their comparative persistence and success at the postsecondary level.

MDHE staff believe the report complements ongoing P-20-centered discussions in Missouri focusing on alignment of expectations for the transition from high school graduation into postsecondary enrollment, and can serve as a valuable resource to local practitioners as well as state policymakers. Pending the availability of resources (including staff) and the consent of other relevant data owners, the report also suggests additional research into the impacts of secondary course-taking, the performance of additional student subgroups (including first-generation students and students of diverse socio-economic status), as well as follow-up into the workforce. MDHE staff will continue to pursue relevant research and support the work of all interested stakeholders in strengthening P-20 student participation and success.

STATUTORY REFERENCE

Section 173.750 RSMo, Annual reporting of performance of graduates, furnishing of report – procedure – data included

RECOMMENDED ACTION

This is a discussion item only

ATTACHMENTS

Attachment A: Missouri Public High School Graduates Data: First-time Freshmen Enrolled in Public Institutions

Attachment B: Chapter 173.750, RSMo., Missouri High School Graduates Performance Report

**Missouri Public High School Graduates Data:
First-time Freshmen Enrolled in Public Institutions**

Table One: Demographic Characteristics of College Entrants								
	1996	% 1996 Total	2005	% 2005 Total	2006	% 2006 Total	% Change 1996- 2006	% Change 2005- 2006
Overall Enrollment	18,110		23,521		23,367		29.0%	-0.7%
Four-year	10,768	59.5%	11,715	49.8%	11,592	49.6%	7.7%	-1.0%
Two-year	7,342	40.5%	11,806	50.2%	11,775	50.4%	60.4%	-0.3%
Women	10,075	55.6%	13,036	55.4%	12,775	54.7%	26.8%	-2.0%
Men	8,034	44.4%	10,485	44.6%	10,590	45.3%	31.8%	1.0%
African American	1,422	7.9%	2,354	10.0%	2,295	9.8%	61.4%	-2.5%
Hispanic	210	1.2%	404	1.7%	436	1.9%	107.6%	7.9%
Caucasian	15,619	86.2%	19,327	82.2%	18,202	77.9%	16.5%	-5.8%
Asian	289	1.6%	350	1.5%	394	1.7%	36.3%	12.6%
Other	570	3.1%	1,086	4.6%	2,040	8.7%	257.9%	87.8%

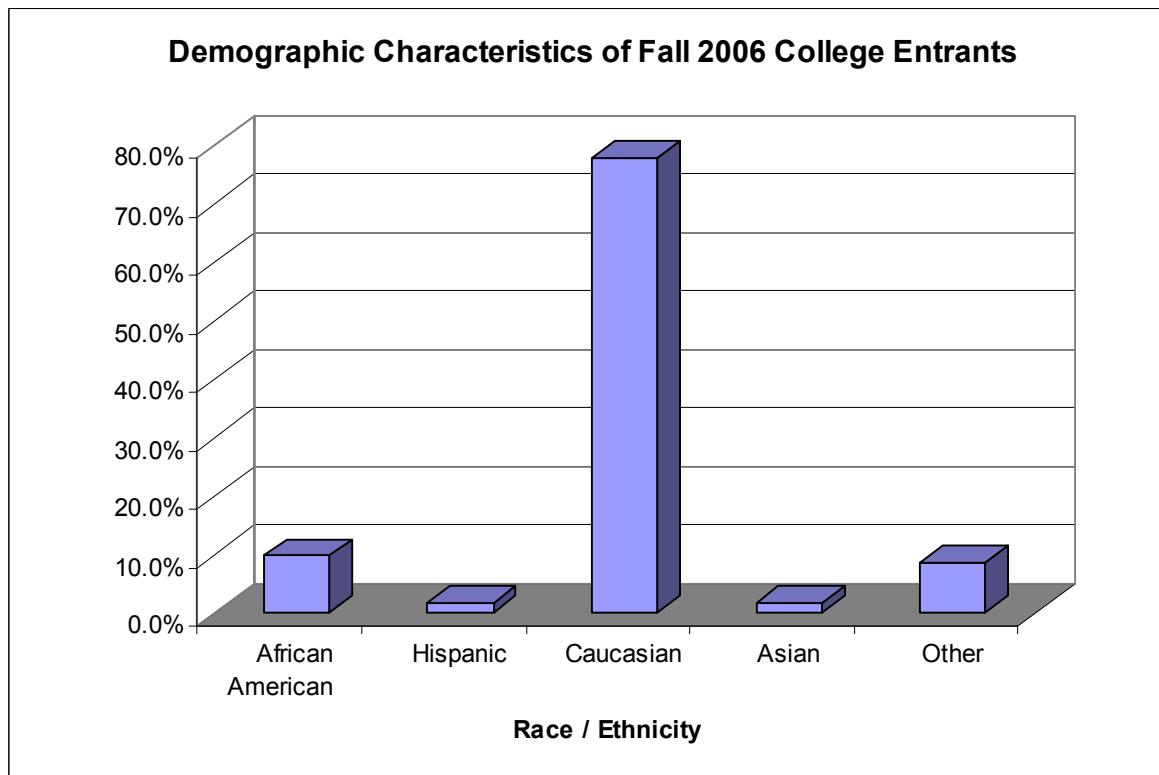


Table Two: Academic Preparation		1996	2005	2006
Percent completing core curriculum	73%		91%	92%
Percent taking ACT	71%		71%	73%
Average ACT	22.56		22.12	22.0%
Remediation				
Overall	4,768	26.3%	8,575	36.5%
- four-year	1,295	27.2%	1,954	22.8%
-two-year	3,473	72.8%	6,621	77.2%
Math	3,279	18.1%	6,916	29.4%
English	2,408	13.3%	4,212	17.9%
Reading	1,287	7.1%	2,395	10.2%

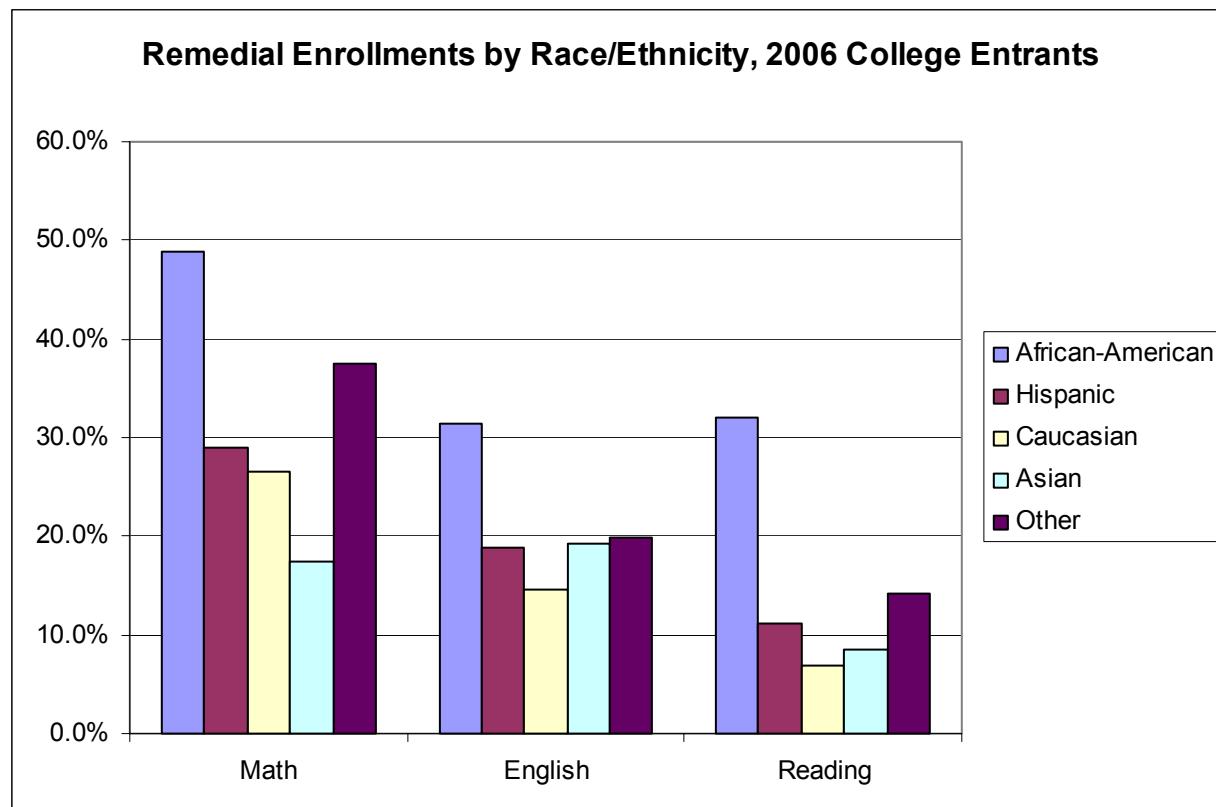


Table Three: Average ACT Score and Remedial Enrollments by Race/Ethnicity and Gender - 2006

	ACT	% Enrolled in Remedial Math	% Enrolled in Remedial English	% Enrolled in Remedial Reading
Women	21.76	31.2%	16.3%	11.0%
Men	22.41	27.7%	17.5%	9.0%
African American	18.16	48.9%	31.4%	32.0%
Hispanic	21.94	28.9%	18.8%	11.2%
Caucasian	22.46	26.6%	14.6%	6.9%
Asian	22.97	17.5%	19.3%	8.6%
Other	21.56	37.5%	19.9%	14.1%

Table Four: Performance and Retention

	1996		2004		2005	
First term retention	17,297	96%	22,432	97%	22,805	97%
First term GPA	2.22		2.6		2.57	
Second term retention	14,982	83%	19,479	84%	19,671	84%
Second term GPA	2.56		2.69		2.69	
Freshman-to-soph retention	13,533	74%	16,900	73%	17,249	73%
- Four-year institutions	8,953	83%	9,206	85%	9,899	84%
- Two-year Institutions	4,580	63%	7,694	63%	7,350	62%

Table Five: Performance and Retention by Race/Ethnicity and Gender - 2005

	Women	Men	African American	Hispanic	Caucasian	Asian	Other
First term retention	97%	97%	96%	97%	97%	97%	96%
First term GPA	2.68	2.44	2.11	2.52	2.64	2.77	2.41
Second term retention	84%	83%	79%	84%	84%	89%	80%
Second term GPA	2.78	2.58	2.22	2.62	2.75	2.85	2.55
Freshman-to-soph retention	75%	72%	63%	71%	75%	82%	69%

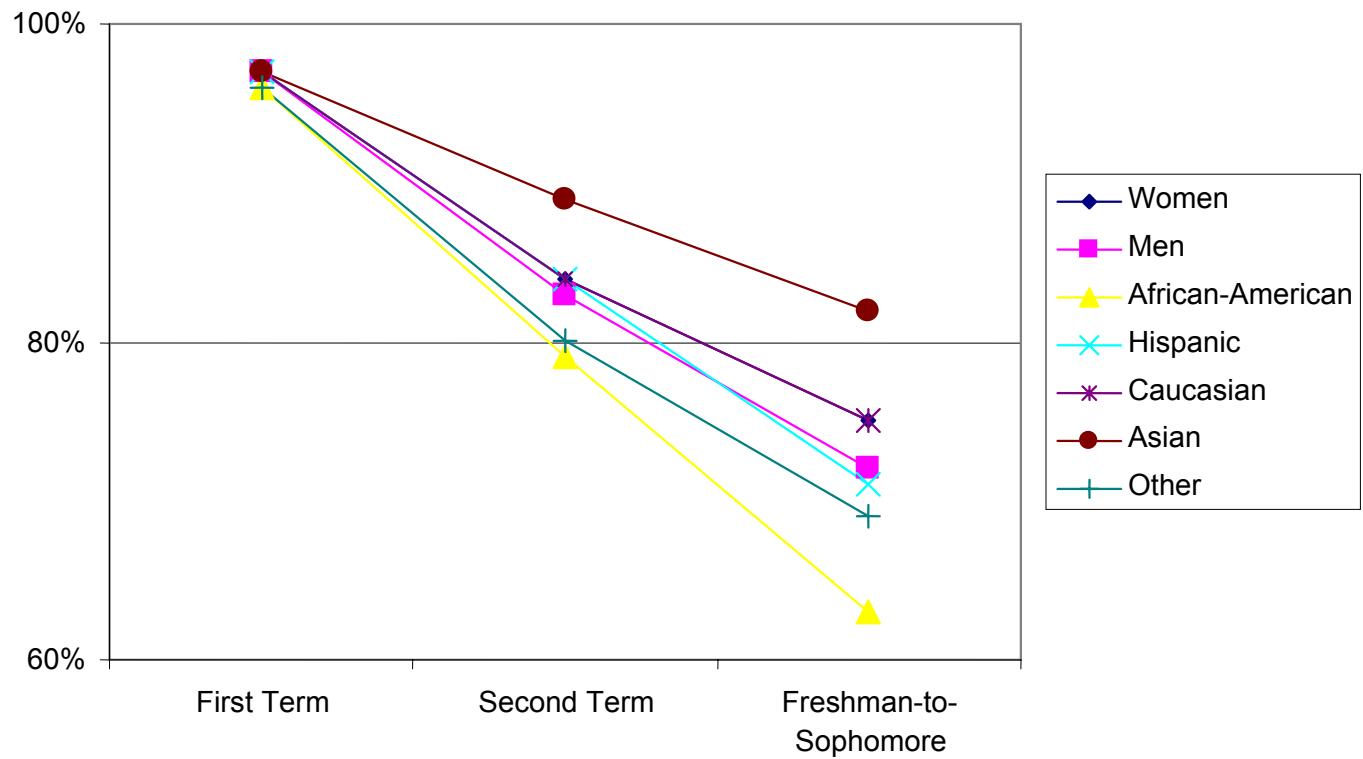
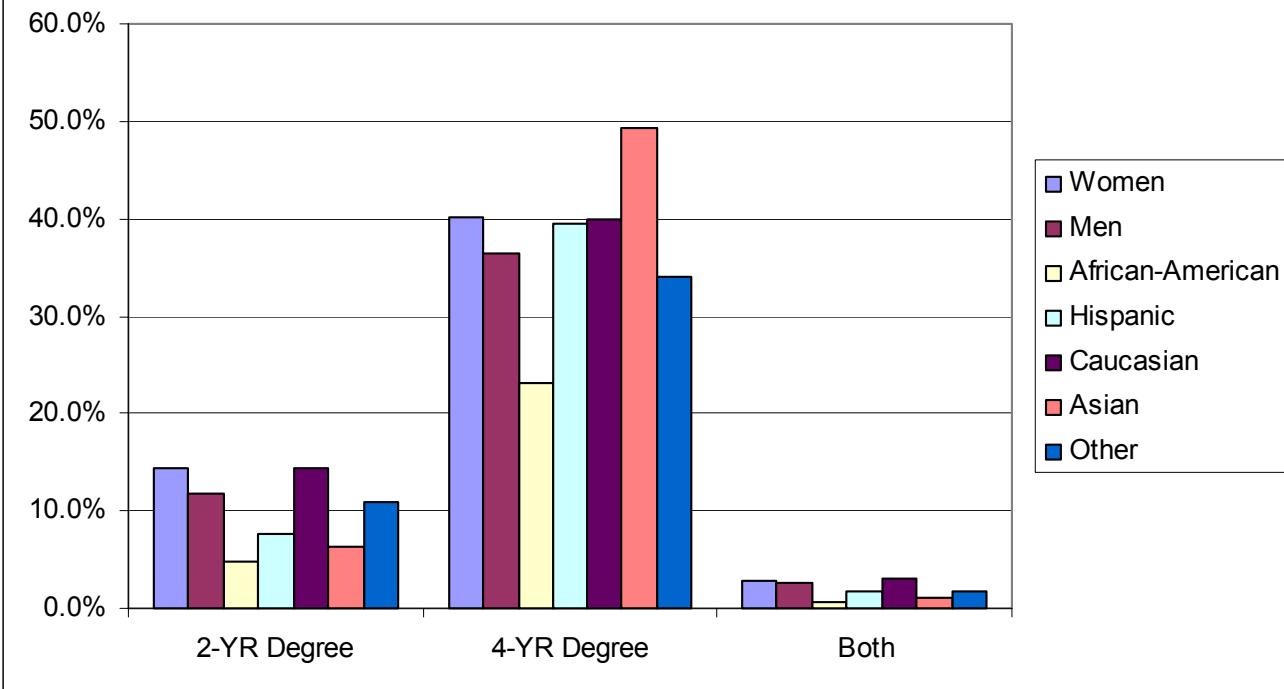
Retention by Gender and Race/Ethnicity, 2005 College Entrants

Table Six: Degree Completion

	1999 Cohort	Percent	2000 Cohort	Percent
First-time, Degree-seeking Freshmen in 1999	17,737		18,717	
- Received 2-year degrees only	2,047	11.5%	2,485	13.3%
- Received 4-year degrees only	6,554	37.0%	7,211	38.5%
- Received both 2- and 4-year degrees	577	3.3%	524	2.8%
- No degree but still enrolled	1,234	7.0%	1,227	6.6%
- Out of system	7,325	41.3%	7,794	41.6%
- Total graduates	9,178	51.7%	9,696	51.8%

**Degree Completions by Gender and Race/Ethnicity, Fall 2000
Cohort**



Degree Completion by Race/Ethnicity and Gender - 2000 Cohort							
	Women	Men	African American	Hispanic	Caucasian	Asian	Other
- Received 2-year degrees only	14.3%	11.9%	4.9%	7.6%	14.3%	6.4%	11.0%
- Received 4-year degrees only	40.2%	36.4%	23.1%	39.5%	39.9%	49.3%	34.0%
- Received both 2- and 4-year degrees	2.9%	2.6%	0.7%	1.7%	3.1%	1.1%	1.7%
Total Percentage Awarded Degrees - Fall 2000 Cohort	54.5%	48.3%	28.0%	47.1%	54.2%	55.7%	44.9%

Missouri Revised Statutes
Chapter 173
Department of Higher Education
Section 173.750

August 28, 2006

Annual reporting of performance of graduates, furnishing of report --procedure--data included.

173.750. 1. By July 1, 1995, the coordinating board for higher education, within existing resources provided to the department of higher education and by rule and regulation, shall have established and implemented a procedure for annually reporting the performance of graduates of public high schools in the state during the student's initial year in the public colleges and universities of the state. The purpose of such reports shall be to assist in determining how high schools are preparing students for successful college and university performance. The report produced pursuant to this subsection shall annually be furnished to the state board of education for reporting pursuant to subsection 4 of section 161.610, RSMo, and shall not be used for any other purpose.

2. The procedures shall be designed so that the reporting is made by the name of each high school in the state, with individual student data to be grouped according to the high school from which the students graduated. The data in the reports shall be disaggregated by race and sex. The procedures shall not be designed so that the reporting contains the name of any student. No grade point average shall be disclosed under subsection 3 of this section in any case where three or fewer students from a particular high school attend a particular college or university.

3. The data reported shall include grade point averages after the initial college year, calculated on, or adjusted to, a four point grade scale; the percentage of students returning to college after the first and second half of the initial college year, or after each trimester of the initial college year; the percentage of students taking noncollege level classes in basic academic courses during the first college year, or remedial courses in basic academic subjects of English, mathematics, or reading; and other such data as determined by rule and regulation of the coordinating board for higher education.

(L. 1993 S.B. 380 § 19 subsecs. 1, 2, 3)

*Contingent expiration date. See section 143.107.

CROSS REFERENCE:

Report of vocational education program, high school students completing course to be combined with report required by this section, RSMo 161.610

(1996) Contingent referendum provision was found to be an unconstitutional delegation of legislative authority thereby making section 143.107 void. Akin v. Director of Revenue, 934 S.W.2d 295 (Mo.banc).